

IN THE UNITED STATES DISTRICT COURT
FOR THE WESTERN DISTRICT OF WISCONSIN

HAVCO WOOD PRODUCTS, LLC,

Plaintiff,

v.

10-cv-566-wmc

INDUSTRIAL HARDWOOD
PRODUCTS, INC.,

Defendant.

In this lawsuit, plaintiff Havco Wood Products, LLC (“Havco”) alleges that defendant Industrial Hardwood Products, Inc. (“IHP”) is infringing five of plaintiff’s patents relating to the use of fiber reinforced composite wood boards in the flooring of truck trailers. The parties have filed cross-motions for summary judgment. (IHP’s Mot. for Summ. J. (dkt. #63); Havco’s Mot. for Summ. J. (dkt. #79).) IHP moves for summary judgment of non-infringement; Havco moves for summary judgment of infringement and validity. For the reasons that follow, the court will (1) grant IHP’s motion of noninfringement as to the ‘766 patent; (2) grant Havco’s motion to file a second amended complaint; and (3) deny all other motions for summary judgment and Havco’s motion to re-assert three claims.

UNDISPUTED FACTS¹**I. Overview**

Plaintiff Havco Wood Products LLC is the owner of U.S. Patent Nos. 5,928,735 (the “735 patent”), 6,183,824 (the “824 patent”), 6,558,766 (the “766 patent”), 6,179,942 (the “942 patent”), and 6,558,765 (the “765 patent”). All of the inventions in the patents-in-suit involve a composite flooring system for semi-trailers typically used by the over-the-road trucking industry. The patented flooring is a combination of a hardwood floor segment and an underlay of a fiber reinforced plastic (“FRP”). The invention purports to disclose certain improvements over earlier flooring systems, including that it resists “pop-out of the hardwood segments at the shaped coupling portions and improves one or more of the flexural modulus, strength and load carrying capacity of the trailer floor.” (735 Patent (dkt. #1-1) 12:23-26.)² To achieve this, each of the patents describes how the hardwood floor segment is to be attached to the FRP. Specifically, the patents describe the hardwood as “substantially continuously bonded” to the FRP or a variant on that language. (*See, e.g., id.* at 10:53-54.)

Defendant Industrial Hardwood Products, Inc. (“IHP”) makes, offers for sale and sells in the United States a reinforced composite truck floor called “Pound Saver.” Havco asserts that IHP’s Pound Saver product and IHP’s method of producing Pound Saver infringes fifteen claims of the above-listed Havco patents.

¹ The court finds the following facts taken from the parties’ proposed findings of fact to be material and undisputed.

² For ease of citation, the number before the colon refers to the patent’s column number, and the number or numbers following the colon refer to that column’s line number or numbers.

II. Truck Trailer Flooring

Conventional flooring for over-the-road truck trailers is typically manufactured from hardwood. The lumber is usually dried, sawed into strips of rectangular cross-section with hooks formed at each end. The strips are coated with glue at the edges, assembled, then compressed and cured. The cured laminated panels are then cut to a desired length and width to form boards, which are then assembled into a kit for installation by trailer manufacturers.

Havco's patents describe certain limitations of conventional hardwood flooring, including accelerated deterioration due to moisture exposure from road spray and other sources, as well as possible water damage to the contents of the truck trailer. The Havco patents also describe strength, flexibility, fatigue resistance, water protection and weight as important considerations for consumers of van-type trailer flooring.

Havco develops, manufactures and sells reinforced structural composite flooring for van-type trailers, typically used in the over-the-road trucking industry. Havco has been in the truck trailer flooring business since 1978 and introduced a structural "Composite Floor" in 2000. Havco contends that in 2000 the market for composite wood flooring was virtually non-existent, but that now the composite flooring market comprises approximately 14% of the overall dry van/truck trailer flooring market.³

³ IHP disputes Havco's statements as to the size of the market, sales data, and its market share, arguing that Havco lacks evidence to prove these facts, but offers no counter evidence. Havco cites its expert Dr. Habib J. Dagher's report, which recites data provided by Havco. Although not material to the present motion, the court provides this information for context, assuming that Havco could authenticate the documents

Havco also contends that it is the industry leader in the market for reinforced structural composite truck flooring and produced approximately 6 million square feet of this type of flooring in 2011. Moreover, Havco contends that its reinforced structural composite truck flooring generated sales of \$39 million in 2011 and that it commanded nearly 100% market share of this segment of the overall trailer/van flooring market.

III. The Scharpf Patent

As already described in this court's claims construction order, the closest prior art to the patents-in-suit is U.S. Patent No. 5,509,715, (the "Scharpf patent"). The Scharpf patent also concerns flooring useful for semi-trailers, but does not teach reinforced structural composite flooring. The invention in the Scharpf patent provides:

A barrier film or fabric, which is permeable to vapor and impermeable to liquid, is disposed on the undersurface of the flooring, and *discontinuous* means adjoins or bonds the film or fabric to the flooring at least in the perimeter of the flooring.

(Scharpf patent (dkt. #33-10) abstract (emphasis added).) Claim 1 of the patent similarly discloses "discontinuous means for adjoining said plastic film or fabric to said undersurface of said flooring at least in the perimeter of said flooring." (*Id.* at 8:1-3.)

The parties agree that one purpose of the invention disclosed in the Scharpf patent is to prevent the penetration of water through the wood floor into the interior of the trailer. The parties dispute, however, the relative importance of another purpose, namely the breathability of the film or fabric underlay in order to allow vapor

provided to Dagher at trial and, therefore, substantiate its claims as to market size, market share, and sales.

permeability to prevent warping or splitting of the wood. (Reply to Havco's PFOFs (dkt. #97) ¶¶ 16, 18, 30, 31.) In support for its position that the primary purpose is preventing water penetration and that the importance of breathability of the film is a secondary purpose, IHP cites to its expert Dr. Edward D. Higgins' report. Specifically, Higgins opines that breathability is "secondary to the primary purpose of isolating or protecting the wood floor boards' underside from liquid" because breathability is referred to as "another object" at some point in the patent. (Higgins Rebuttal Report (dkt. #73) ¶ 61.)

A review of the Scharpf patent, in particular the summary of the invention, does not support IHP's position that permeability of vapor is not as important as impermeability of water. Scharpf describes:

It is important for my invention that the plastic film or fabric . . . is impervious to moisture but pervious to vapor. Film and fabric materials of this nature are referred to as 'breathable.' The term 'breathable' as used herein and in the appended claims means a film or fabric that is impermeable to liquid and permeable to vapor[.]

Thus, the wood flooring is protected, and any liquid such as water, is prevented from entering the trailer, . . . or water interiorly disposed when vaporized will pass through the barrier, because the fabric or plastic is allowed to breathe and thereby prevents warping or splitting of the wood.

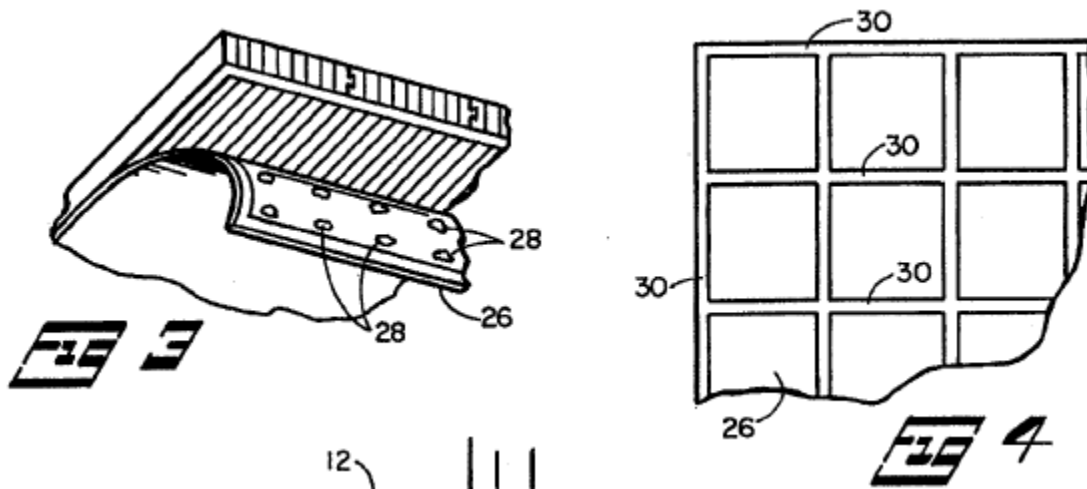
(Scharpf patent (dkt. #33-10) 2:66-3:13.)

Scharpf uses a "discontinuous bond line" between the barrier film or fabric and the wood flooring to allow for the breathability of the barrier film. (Scharpf patent (dkt. #33-10) 3:17-18.) The patent defines this term as:

The terms "discontinuous means" and "discontinuous bond line" as used herein and in the appended claims mean the line

of adjoining, attaching or uniting the two components (i.e., barrier and flooring) so as to be essentially adjacent, and as a discontinuous pattern in that less than the entire surface or area of the film or fabric is adjoined to the flooring.

(Scharpf patent (dkt. #33-10) 3:20-26.) The patent contains two illustrations of the “discontinuous means or discontinuous bond line”:



(*Id.* at p.2; *see also id.* at 3:53-59.)⁴

Havco’s expert opines that these illustrations disclose a bond line that is significantly less than the entire surface or area of the barrier film adjoined to the flooring, which is consistent with the invention’s goal of vapor permeability. As discussed more in the opinion below, Havco’s expert also opines that the adhesive must cover far less than the entire surface or area of the breathable film in order to permit water vapor to permeate; the Scharpf film barrier would not be permeable to water vapor if it covered 96.3% of the wood surface; testing of boards based on Scharpf’s description of his invention establish no reinforcement or strengthening properties from the

⁴ IHP contends that these are not the only two embodiments contemplated by the Scharpf patent. (IHP’s Resp. to Havco’s PFOFs (dkt. #91) ¶ 34 (citing Higgins Rebuttal Report (dkt. #73) ¶ 59 (placing significance on the patent’s use of “an” to suggest that there are other embodiments)).)

discontinuous bond; and these boards show no improvement in flexural modulus, strength or load carrying capacity compared to conventional wood truck flooring.

IHP's expert disputes these allegations, arguing that: Dr. Dagher's testing is unreliable; the Scharpf patent does not disclose any improvement in resistance to pop-out of the hardwood boards that comprise the flooring; and the flooring exhibits improvement in at least one of flexural modulus, strength and load-carrying capacity as compared to the wood flooring without a barrier film.

IV. Havco's Patents

Each patent claim asserted by Havco contains either the term "substantially continuously bonded" or "substantially continuously coating" or a slight variant. The court previously construed both terms as follows:

- **"substantially continuously bonded"** means bonding the hardwood floor board to the FRP underlay substantially continuously to obtain composite flooring that resists pop-out of the hardwood segments at the shaped coupling portions and improves one or more of the flexural modulus, strength and load carrying capacity of the vehicular trailer floor. This term excludes a discontinuous bond line forming a discontinuous pattern of connection between the FRP and the floor board in that less than the entire surface or area of the FRP is adjoined to the hardwood floor board.
- **"substantially continuously coating"** means coating the hardwood floor board to the FRP underlay substantially continuously to obtain composite flooring that resists pop-out of the hardwood segments at the shaped coupling portions and improves one or more of the flexural modulus, strength and load carrying capacity of the vehicular trailer floor. This term excludes a discontinuous bond line forming a discontinuous pattern of connection between the FRP and the floor board in that less than the entire surface or area of the FRP is adjoined to the hardwood floor board.

(12/13/11 Order (dkt. #61) 3 (emphasis omitted).)⁵

V. Alleged Infringing Product: Pound Saver

A. Development

In designing Pound Saver, IHP tested developmental prototypes against Havco's patented flooring to measure and compare strength and durability. During the development of Pound Saver, IHP gained information on the materials used in Havco's composite floor and information on Havco's manufacturing process. IHP purchased materials from some of the same vendors that Havco uses or had used in the past. IHP obtained a handwritten lay-out drawing depicting part of Havco's production process in 2007.⁶ After working on the development of Pound Saver for five years, IHP made its first commercial sale in 2010.

B. Adhesion / Bonding Method

The surfaces of the FRP/wood interfaces of samples provided by IHP to Havco's expert were covered in adhesive, except for two strips running the length of a board.⁷ In its production process, Pound Saver's "adhesive lacking" strips are each normally 3/8"

⁵ In the court's claim construction order, the court also made certain findings concerning disclaimers made during the prosecution of the Havco claims. (11/10/11 Order (dkt. #51).) The court will not recount those findings in this opinion.

⁶ As IHP points out, detailed descriptions of Havco's manufacturing process were previously published in its patents.

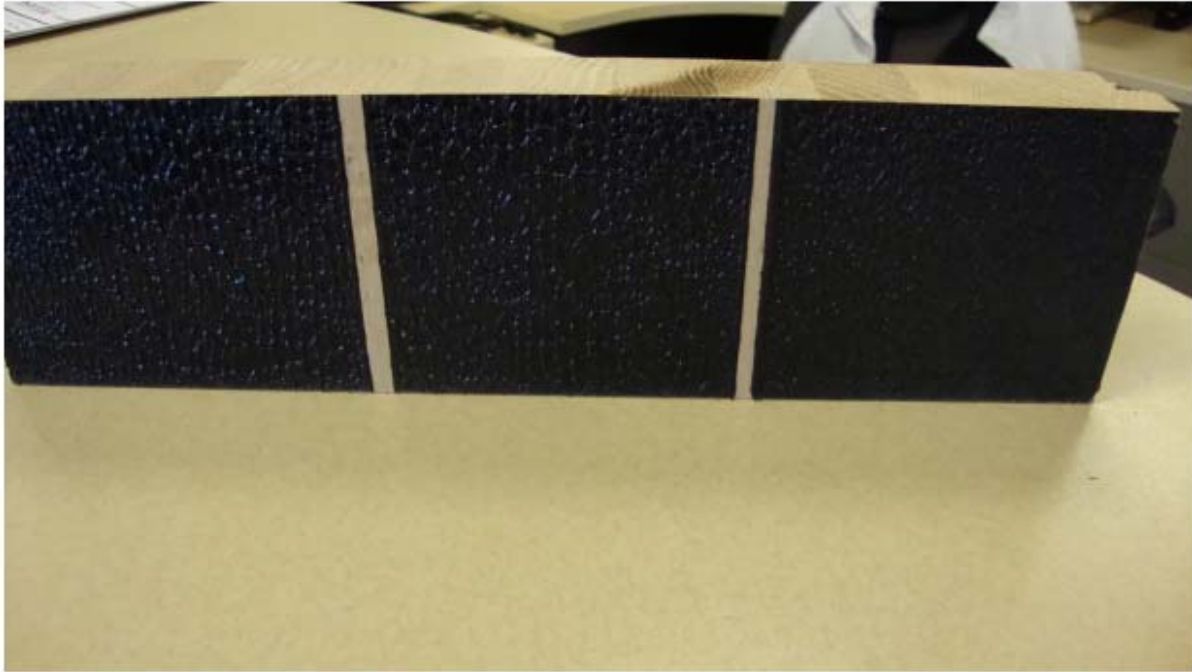
⁷ The court addresses IHP's contention that the strips may not always run the entire length of the board later in this opinion.

wide when adhesive is applied to the board. These strips used to be 1/4" wide each, but IHP modified the width in order to address possible migration sometime in 2011.

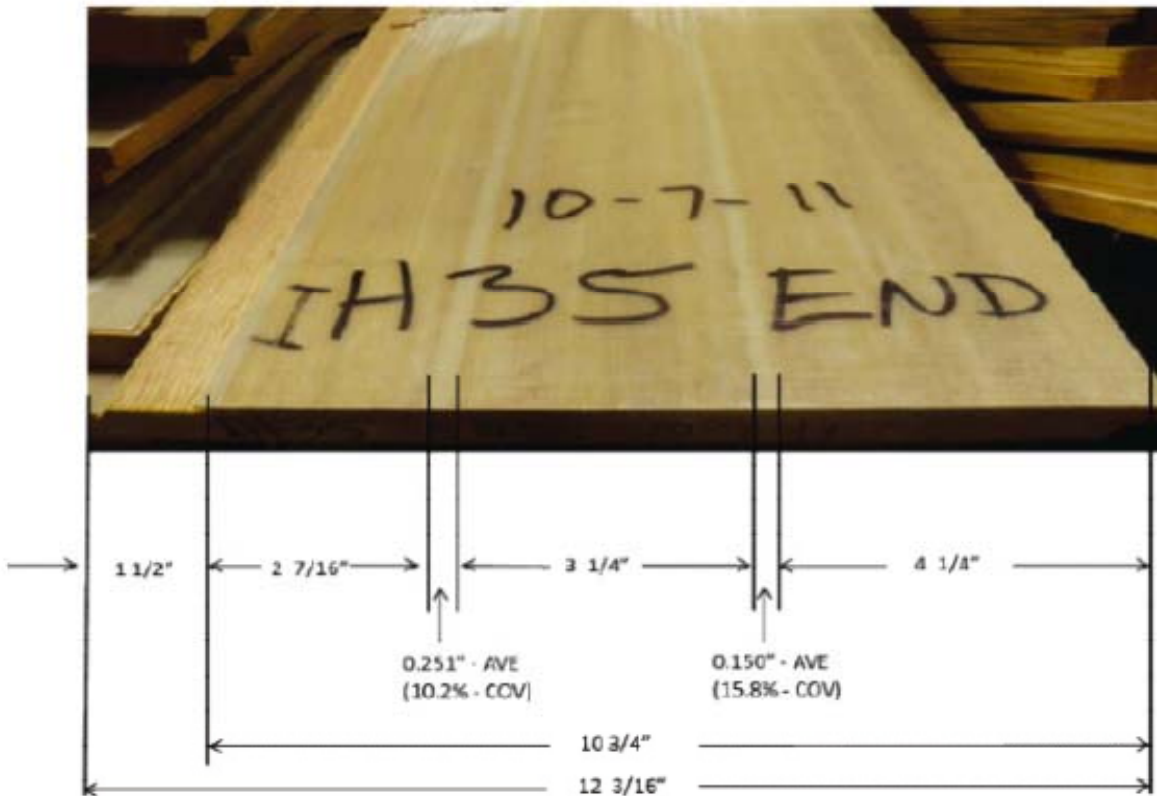
Havco's expert's tests revealed that when adhesive is first applied, the wood floor board has 94% adhesive coverage, but the adhesive migrates into the adhesive lacking strips during the production process when a series of pinch rollers squeeze the FRP and wood board together, expanding the coverage from approximately 94% to 96.3%.⁸ IHP does not dispute that some migration occurs, but relying on Havco's expert's testing, contends that any migration is such that it does not compromise the adhesive-lacking gaps running the entire length of the board. Pound Saver also uses approximately one-third less glue than Havco's composite floor, which IHP contends results in lower expense and lighter truck floors.

The parties both submitted photographs of a full twelve-inch Pound Saver board, illustrating the adhesive-lacking stripes:

⁸ Havco's expert further opines that adhesive migration could result in surface area coverage greater than 96.3%. In response, IHP's expert opined based on testing that, due to the type of adhesive and size of any adhesive beads, the adhesive lacking gaps will always remain open and run the entire length of each board.



(IHP's Opening Br. (dkt. #64) 9.)



(IHP's Opening Br. (dkt. #64) 10; Dagher Report (dkt. #83-1) 127.)

In the first photo, submitted by IHP, the section photographed captures the twelve-inch width of one Pound Saver wood floor board, though not its entire length, and the FRP has not been attached. The adhesive has been colored black (it is naturally almost clear) so that the adhesive pattern can be easily observed in this photograph. The deliberate gaps in the adhesive layer were created using a special adhesive roller having two 1/4 inch wide adhesive-lacking grooves.⁹ When applied, this results in adhesive-lacking gaps running the entire length of wood floor board from end to end (typically 20-60 feet).

Havco disputes whether the strips shown in this first photo accurately depicts their size after the FRP is placed given migration of the adhesive. In the second photograph, submitted in Havco's expert's report, the adhesive-lacking gaps, which Havco's expert refers to as "unresinated areas," are visible as lighter strips.

In IHP's Pound Saver manufacturing process, the planar layer of FRP is fed into the production line from a large "spool" suspended above the production line near the coating roller used to apply adhesive to the wood boards. Visual inspection of the Pound Saver FRP samples reveals textural differences in the opposing surfaces of the FRP, with one surface comparatively glossy and smooth while the other surface is nonglossy and rough. The non-glossy, rougher surface of the FRP is the surface bonded to the wood board. The planar layer of a Pound Saver FRP is substantially aligned lengthwise along the longitudinal axis of the wood member with the surface of the wood member and/or FRP coated with a polyurethane hot melt adhesive, except for the two adhesive-lacking

⁹ As described above, IHP later widened the roller grooves to 3/8 inch wide each.

gaps. The Pound Saver FRP is joined to the wood board and pressed together by pinch rollers.

C. Strength / Performance

Pound Saver's adhesive bond forms a composite floor board providing significant reinforcement and strengthening properties and significant improvements in flexural modulus, strength and load carrying capacity as compared to conventional wood flooring. Relying on Havco's expert's testing, IHP contends that Pound Saver's bond does not achieve the same strength as Havco's bond.

In response to this contention, Havco cites to the following testimony from a 30(b)(6) deposition of IHP's corporate representative describing a comparison of "wet shear loads" of 2 inch by 12 inch samples having a discontinuous and continuous bond line:

Q: Basically it seems like the conclusion is that the discontinuous glueline had almost the same performance as a continuous glueline. Do you see that?

A: I do.

Q: Was that the conclusion of [IHP's] R & D team?

A: I believe it was.

(Reply to Havco's PFOFs (dkt. #97) ¶ 48.) IHP's web site also contains marketing materials on Pound Saver, which state the "benefits" of Pound Saver, including that Pound Saver is "33% stronger than standard oak flooring," "increases working life by reducing floor fatigue," and that the FRP layer "shields the underside of the floor from water, salt and gravel." Testing of Pound Saver samples provided by IHP confirm that

the Pound Saver Product resists pop-out of the hardwood segments at the shaped coupling portions, or “hook joints,” and exhibits improvement in one or more of the flexural modulus, strength and load carrying capacity compared to conventional wood truck flooring.

D. Other Characteristics of Pound Saver

Material to its motion for summary judgment of infringement, Havco submitted several findings of facts concerning other characteristics of Pound Saver, namely, the type of wood used, dimensions, joints, and the type of FRP. Largely undisputed by IHP, the court briefly summarizes these facts as follows:

IHP’s Pound Saver product is made from oak, which is a hardwood. It is a composite truck floor, designed and configured for installation in a vehicular trailer. Pound Saver has an exposed upper hardwood surface. Pound Saver is designed so that hardwood boards extend up to a length substantially equal to the longitudinal length of the trailer, each board having a top surface and a bottom surface, and a board width less than the lateral width of the trailer.

A Pound Saver board is formed by a plurality of approximately 1” “sticks” or segments joined end-to-end by machined joints called “hook joints;” a “hook joint” is a standard shaped coupling mechanism used to make conventional wood truck flooring. IHP uses solid wood “components” to make a Pound Saver board and that length and width of the sticks are substantially less than the length of a board, and that “sticks” are arranged substantially parallel to the length of the board and are joined to one another in a unitary arrangement. A plurality of hardwood boards are designed and arranged so that

the first side surface and said second side surface of adjacent boards form a continuous trailer floor having an upper hardwood surface and a bottom composite surface which extends the lateral width of the vehicular trailer, a joint region being formed at locations at which said first and second side surface of adjacent boards approximate one another.¹⁰

IHP's Pound Saver incorporates a substantially planar layer formed of a fiber reinforced polymer. This polymer layer is bonded to the bottom surface of the hardwood board as described in detail above and extends unitarily across the width and along the longitudinal length of each hardwood board.

Pound Saver contains a "shiplap" machined in the side surface of each board. Visual observation and testing of Pound Saver samples provided by IHP confirm the use of shiplap joints where a first side surface is provided with an upper lip portion, and a second side surface is provided with a lower lip portion. When assembled, the first side surface of one hardwood board is placed next to the second side surface of an adjacent hardwood board, forming a shiplap joint in which the upper lip portion at least partially overlies the lower lip portion. Pound Saver's FRP underlies substantially all of the hook joints in the floor.

The FRP used by IHP is impervious to water. Samples provided by IHP showed that about 90% of the fibers of the Pound Saver FRP extended in a direction

¹⁰ IHP does not dispute this fact, but clarifies that IHP does not assemble truck floors, rather the floors are assembled and installed by its customers, as discussed more fully in the opinion below. (*See infra* Opinion Part I.D.)

substantially parallel to the longitudinal length of the Pound Saver boards and that the fibers are glass fibers.¹¹

E. IHP's Patent

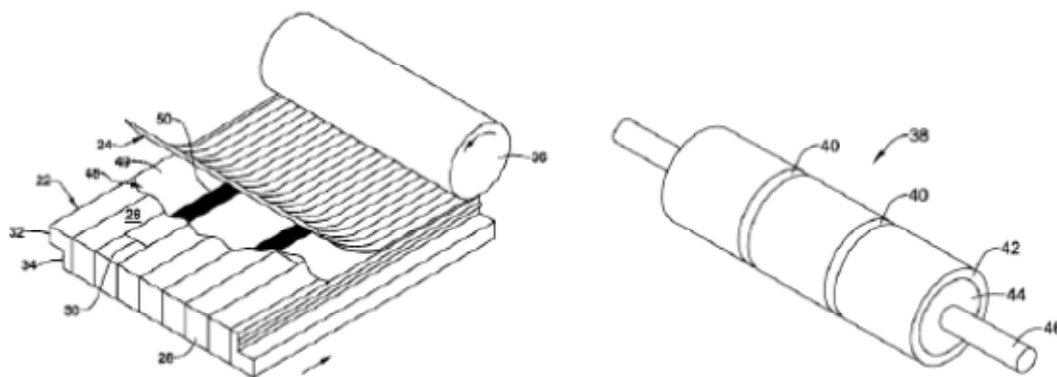
In 2008, before launching its composite floor, IHP applied for and received a U.S. Patent on its composite flooring. The patent specifically focused on the advantage of a discontinuous adhesive pattern between the FRP and the wood boards. (U.S. Patent No. 7,765,758 (the "IHP patent") (dkt. #67-6).) In issuing the patent, the United States Patent and Trademark Officer considered all five of Havco's patents-in-suit before granting IHP a patent on its composite flooring having a discontinuous adhesive pattern.¹²

The IHP patent discloses a composite floor board, identified by the number 22 in the illustration below. The adhesive layer (48) is a pattern made up of three discrete sections having adhesive (49) separated by two areas having no adhesive (50). The two

¹¹ IHP purchases its FRP from a company named Lamilux. Pound Saver's FRP includes a combination of continuous rovings, or strands, and a fabric of reinforcing fibers impregnated by a polymeric resin. The surface of the FRP that is adjoined to the underside of the wood board in the Pound Saver product is sanded or abraded by Lamilux to prepare that surface for bonding. The court address the parties' dispute about IHP's role in selecting the sanding finishing method of the FRP IHP purchased from Lamilux below. (*See infra* Opinion Part I.E.)

¹² Havco disputes any inference that the Pound Saver product is an embodiment of the IHP patent, contending that the IHP patent is immaterial to this lawsuit since Havco is not alleging that the IHP patent infringes the Havco patents-in-suit. Assuming IHP is practicing its patent in producing Pound Saver, the Federal Circuit has held that "separate patentability" is relevant to an infringement claim. *See e.g., Nat'l Presto Indus., Inc. v. West Bend Co.*, 76 F.3d 1185, 1192 (Fed. Cir. 1996) ("Whether a modified device is within the scope of the prior patent, literally or by equivalency, depends on the particular facts. The fact of separate patentability is relevant, and is entitled to due weight.").

areas of no adhesive (50) each run the entire length, between 20-60 feet, of every floor board. The adhesive pattern is accomplished by a special roller having two 3/8 inch adhesive-lacking grooves (40).



(IHP's Opening Br. (dkt. #64) 7; IHP patent (dkt. #67-6) Figs. 2, 4.)

OPINION

I. Claims Construction Revisited

Much of Havco's opposition to IHP's motion for summary judgment of noninfringement is spent addressing this court's claims construction order, and for good reason. After reviewing the prosecution history of the '735 patent, and in particular the treatment of Scharpf, the court now believes that the prosecution disclaimer provided in the court's original claims construction and reiterated in its order on Havco's motion for clarification and reconsideration is too broad. Specifically, the prosecution disclaimer in the court's claims construction of "substantially continuously" effectively divorced the discontinuous bond line disclosed in Scharpf from its disclosed purpose to ensure that the fabric or film undercoating is impervious to water but pervious to vapor.

In describing the Scharpf invention and distinguishing it from the invention claimed, the applicants repeatedly emphasized the functional purpose of Scharpf's discontinuous bond line:

- “The Scharpf flooring is based on having a *breathable undercovering*, which by the very concept calls for a *discontinuous bond* between wood and Tyvek.” (6/22/11 Declaration of Anthony R. Zeuli (“6/22/11 Zeuli Decl.”), Ex. 10 (dkt. #29-11) 89 (emphasis added).)
- “Scharpf has a *vapor permeable, liquid impermeable film discontinuously joined* to an undersurface of a floor by a discontinuous pattern of adhesive (28) to allow the floor to be breathable.” (6/22/11 Zeuli Decl., Ex. 2 (dkt. #29-3) 254 (emphasis added).)
- “The Scharpf patent is directed to a trailer floor protected from water infiltration from below by a sheet of *water impervious, but vapor permeable* material. The materials of the Scharpf patent are not fiber reinforced, and the Scharpf patent *expressly requires that the material be only discontinuously bonded* to the wood floor.” (6/22/11 Zeuli Decl., Ex. 2 (dkt. #29-3) 77 (emphasis added).)
- “The wooden flooring in Scharpf has a ‘film o[r] fabric’ barrier attached to the flooring in a ‘discontinuous pattern to the under-surface of the flooring.’ Moreover, as stated in column 5, lines 40-44 [of Scharpf], *continuous bonding is to be avoided by Scharpf since it defeats the purpose for which Scharpf employs the barrier film.*” (1/20/12 Declaration of Anthony Zeuli (“1/20/12 Zeuli Decl.”), Ex. 13 (dkt. #67-8) 3-4.)

While at times the inventors of the ‘735 patent discuss only a discontinuous bond in the prosecution history, the court finds, when read as a whole, that the applicants expressly distinguished Scharpf both on the basis of a discontinuous bond line *and* the functional purpose of such a bond. In issuing its previous order, the court focused on the “discontinuous bond line” language without accounting for the applicants’ discussion of the functional properties resulting from the bond. *See In re Hedges*, 783 F.2d 1038, 1041 (Fed. Cir. 1986) (“It is impermissible within the framework of section 103 to pick and choose from any one reference only so much of its as will support a given position, to the

exclusion of other parts necessary to the full appreciation of what such reference fairly suggests to one of ordinary skill in the art.”).

Keeping in mind that prosecution disclaimers must be “clear and unmistakable,” *Cordis Corp. v. Boston Scientific Corp.*, 561 F.3d 1319, 1329 (Fed. Cir. 2009), the court will narrow the prosecution disclaimer in its claims construction to account for the recognition by the inventors of the ‘735 patent of the important link between the discontinuous bond disclosed in Scharpf and the ability to be pervious to vapor and impervious to water. In the prosecution disclaimer, the court will also change “FRP” to “underlay” to align more closely to the Scharpf invention. Accordingly, the court amends its construction of the “substantially continuously” limitation as follow:

- **“substantially continuously bonded”** means bonding the hardwood floor board to the FRP underlay substantially continuously to obtain composite flooring that resists pop-out of the hardwood segments at the shaped coupling portions and improves one or more of the flexural modulus, strength and load carrying capacity of the vehicular trailer floor. This term excludes a discontinuous bond line forming a discontinuous pattern of connection between the underlay and the floor board in that less than the entire surface or area of the underlay is adjoined to the hardwood floor board so that the underlay is pervious to vapor and impervious to water.
- **“substantially continuously coating”** means coating the hardwood floor board to the FRP underlay substantially continuously to obtain composite flooring that resists pop-out of the hardwood segments at the shaped coupling portions and improves one or more of the flexural modulus, strength and load carrying capacity of the vehicular trailer floor. This term excludes a discontinuous bond line forming a discontinuous pattern of connection between the underlay and the floor board in that less than the entire surface or area of the underlay is adjoined to the hardwood floor board so that the underlay is pervious to vapor and impervious to water.¹³

¹³ The court rejects Havco’s argument that because IHP’s adhesive pattern is “‘continuous’ in the direction of bending stresses” it falls within “substantially continuously” limitation. (Havco’s Opp’n (dkt. #80) 26.) This construction reads words

II. Infringement

A. Overview of the Law Governing Infringement Claims

Havco bears the burden of proving infringement by a preponderance of the evidence. *Latiram Corp. v. Rexnord Inc.*, 939 F.2d 1533, 1535 (Fed. Cir. 1991). Patent infringement involves two steps: “First, the claim must be properly construed to determine its scope and meaning. Second, the claim as properly construed must be compared to the accused device or process.” *Absolute Software, Inc. v. Stealth Signal, Inc.*, 659 F.3d 1121, 1129 (Fed. Cir. 2011) (quoting *Carroll Touch, Inc. v. Electro Mech. Sys., Inc.*, 15 F.3d 1573, 1576 (Fed. Cir. 1993)) (internal quotation marks omitted).

“Literal infringement requires that each and every limitation set forth in a claim appear in an accused product.” *V-Formation, Inc. v. Benetton Grp. SpA*, 401 F.3d 1307, 1312 (Fed. Cir. 2005). “If any claim limitation is absent from the accused device, there is no literal infringement as a matter of law.” *Bayer AG v. Elan Pharm. Research Corp.*, 212 F.3d 1241, 1247 (Fed. Cir. 2000). “Infringement under the doctrine of equivalents requires that the accused product contain each limitation of the claim or its equivalent.” *AquaTex Indus., Inc. v. Techniche Solutions*, 419 F.3d 1374, 1382 (Fed. Cir. 2005). “An element of an accused product is equivalent to a claim limitation if the differences between the two are insubstantial, a question that turns on whether the element of the accused product ‘performs substantially the same function in substantially the same way to obtain the same result’ as the claim limitation.” *Absolute Software*, 659 F.3d at 1130-40

into the claim limitations which are neither there nor supported by the prosecution history.

(quoting *AquaTex Indus.*, 419 F.3d at 1382). “Infringement, whether literal or under the doctrine of equivalents, is a question of fact.” *Absolute Software*, 659 F.3d at 1129-30 (citing *Bai v. L & L Wings, Inc.*, 160 F.3d 1350, 1353 (Fed. Cir. 1998)).

Persons who make, use, offer for sale, or sell the patented invention within the United States or who import that patented invention into the United States are so-called “direct infringers.” 35 U.S.C. § 271(a). Subsections (b) and (c) of § 271 also provide for liability of contributory infringers or inducers of infringement:

(b) Whoever actively induces infringement of a patent shall be liable as an infringer.

(c) Whoever offers to sell or sells within the United States or imports into the United States a component of a patented machine, manufacture, combination or composition, or a material or apparatus for use in practicing a patented process, constituting a material part of the invention, knowing the same to be especially made or especially adapted for use in an infringement of such patent, and not a staple article or commodity of commerce suitable for substantial noninfringing use, shall be liable as a contributory infringer.

35 U.S.C. § 271.

B. Asserted Claims

The court previously granted IHP’s motion to limit the number of asserted claims, limiting Havco to 15 asserted claims. (11/10/11 Order (dkt. #51).) In response, Havco identified the following asserted claims:

Patent	Asserted Claims
'735	1, 4 and 6
'824	1, 8 and 12
'942	1, 16 and 27
'765	1, 2, 23 and 25
'766	1 and 2

(1/20/12 Zeuli Decl., Ex. 5 (dkt. #67-5).)

For each patent, Havco has identified one independent claim, which for each happens to be denominated claim "1." All of Havco's other claims are dependent either directly on claim 1 or on a dependent claim which is in turn dependent on claim 1. Not coincidentally, all of the asserted independent claims also contain the "substantially continuously" limitation:

- Claim 1 of the '735 patent contains the following limitation: "said polymer layer being *substantially continuously* bonded to said bottom surface." ('735 patent (dkt. #1-1) 10:53-54 (emphasis added).) Asserted claim 4 is dependent on claim 1; asserted claim 6 is dependent on claim 4 (and, thus, also on claim 1).
- Claim 1 of the '824 patent contains the following limitation: "said polymer layer being *substantially continuously* bonded to said bottom surface." ('824 patent (dkt. #1-2) 11:22-23 (emphasis added).) Asserted claims 8 and 12 are both dependent on claim 1.
- Claim 1 of the '942 patent contains the following limitation: "*substantially continuously* coating one or both of the machined major surface of the wood member and the altered major surface of the planar layer of fiber reinforced polymer with a reactive hotmelt adhesive." ('942 patent (dkt. #1-3) 14:37-41 (emphasis added).) Asserted claims 16 and 27 are both dependent on claim 1.
- Claim 1 of the '765 patent contains the following limitation: "*substantially continuously* coating at least one or both of a major surface of the wood member and the at least one altered major surface of the water impervious layer with a

reactive hotmelt adhesive” (‘765 patent (dkt. #1-4) 14:20-23 (emphasis added).) Asserted claims 2 and 23 are dependent on claim 1; asserted claim 25 is dependent on claim 2 (and, thus, also on claim 1).

- Claim 1 of the ‘766 patent contains the following limitation: “a water impervious layer continuously bonded to said bottom surface of each board by a *substantially continuous* adhesive bond” (‘766 patent (dkt. #1-5) 11:4-6 (emphasis added).) Asserted claim 2 is dependent on claim 1.

If the court finds non-infringement of these independent claims, then it “necessarily follows” that claims dependent on the non-infringed independent claims “are also not infringed.” *Yoon Ja Kim v. ConAgra Foods, Inc.*, 465 F.3d 1312, 1317 (Fed. Cir. 2006).

The parties’ cross motions for summary judgment principally turn on whether Havco has put forth enough evidence by which a reasonable jury could find that IHP’s Pound Saver product infringes the “substantially continuously” limitation. Indeed, IHP limited its motion for summary judgment of noninfringement to the “substantially continuously” limitation. In its motion for summary judgment of infringement, Havco moves on *all* asserted claims. In response, IHP disputes whether the Pound Saver product fits within three terms in various independent claims of the patents-in-suit. Specifically, IHP disputes that it infringes the following terms:

- “continuous trailer floor” in claim 1 of the ‘735 patent and claim 1 of the ‘824
- “altering at least one major surface” in claim 1 of the ‘942 patent and claim 1 of the ‘765 patent
- “continuously bonded” in claim 1 of the ‘766 patent

The court addresses each disputed issue below.

C. “substantially continuously” limitation

In light of the court’s revised construction of this term, there are disputes of fact as to whether IHP’s Pound Saver product falls within the “substantially continuously” limitation. There appear at least three possible ways in which Pound Saver product does *not* meet this limitation. First, Pound Saver may fall within the prosecution disclaimer because its product has a discontinuous bond line that is impervious to water and pervious to vapor. Second, Pound Saver may not achieve the intended objective of the disclosed invention because it lacks certain strength and fatigue-resistance characteristics. Third, Pound Saver’s two adhesive-lacking strips running the entire length of each board may take it outside of the claimed “substantially continuously” bond or coating.

As for the first possibility, Havco must demonstrate that IHP’s Pound Saver product is pervious to water or impervious to vapor to fall within the amended prosecution disclaimer. Havco contends that “Scharpf’s film barrier would not be permeable to water vapor if the ‘discontinuous bond’ or ‘discontinuous pattern of connection’ between the film and wood surfaces in Scharpf covered 96.3% of the surface areas of the Tryvek-wood interface.” (Havco’s PFOFs (dkt. #82) ¶ 51 (citing Dagher Decl. (dkt. #83) ¶ 2; Dagher Infringement Report (dkt. #83-1) ¶ 15).) In response to this proposed finding of fact, IHP contends that the Scharpf patent “broadly discloses a discontinuous bond line without reference to the amount of adhesion,” focusing on the water impermeable aspects of the invention and describing “breathability” as a secondary concern. Since IHP does not take issue with Havco’s principal point that the undercoating film or fabric in Scharpf would be impermeable to both water *and* vapor if the bond between the undercoating and the wood surface covered 96.3% of the surface

area of the undercoating-wood interface, the court finds that there is no dispute of fact as to whether IHP's product falls within the scope of the prosecution disclaimer. Therefore, the court finds as a matter of law that IHP's Pound Saver product does not employ a discontinuous bond line so that the undersurface is impervious to water and pervious to vapor.

As for whether Pound Saver "resists pop-out of the hardwood segments at the shaped coupling portions and improves one or more of the flexural modulus, strength and load carrying capacity of the vehicular trailer floor," IHP acknowledges that its floor "improves those properties over conventional truck flooring" but contends that with respect to the strengthening properties, "it does not achieve the same strength as Havco's substantially continuous bond," and with respect to resisting popout, argues that "almost any material affixed to the bottom of the flooring with 'resist' pop-out." (IHP's Resp. to Havco's PFOFs (dkt. #91) ¶¶ 46, 47, 49.) IHP's disputes may give rise to a dispute as to the extent of Pound Saver's strengthening capabilities, and specifically, how Pound Saver compares to Havco's product, but it does not give rise to a genuine issue of material fact as to whether Pound Saver achieves the intended objective of the patented invention.

Accordingly, the only remaining dispute is whether the hardwood floor board is "substantially continuously" bonded to the FRP underlay where each board contains two adhesive-lacking strips running the length of the board, which ranges in size from roughly .249 to .348 inches in width before the FRP is applied and between .150 and .250 inches after the FRP has been applied. On this record, this issue is one for the jury, as is the related issue of whether Pound Saver's bonding is equivalent to that of a "substantially

continuous” bond.¹⁴ Both sides have compelling evidence in their favor. Havco’s unrelenting focus on the percentage of total coverage of the bond, approximately 94-96%, provides a sound basis for a jury to find the Pound Saver bond substantially continuous. On the other hand, IHP’s evidence that the adhesive-lacking strips run the entire length of each board, coupled with it having attained a separate patent using this technology over Havco’s prior art, cuts in favor of a finding of noninfringement.¹⁵ As such, the court will deny both parties’ motions for summary judgment, finding a genuine issue of material fact as to each of the asserted independent claims and, necessarily, as to

¹⁴ Havco may proceed under a doctrine of equivalents theory of infringement, but in doing so may not seek to recapture a discontinuous bond line forming a discontinuous pattern of connection between the underlay and the floor board in that less than the entire surface or area of the underlay is adjoined to the hardwood floor board so that the underlay is pervious to vapor and impervious to water. *See, e.g., Cross Medical Prods., Inc. v. Medtronic Sofamor Danek, Inc.*, 480 F.3d 1335, 1341 (Fed. Cir. 2007) (“Prosecution history estoppel prevents a patentee from recapturing under the doctrine of equivalents subject matter surrendered during prosecution to obtain a patent.”).

¹⁵ Havco attempts to raise another factual dispute, arguing that migration of the adhesion may result in the adhesive-lacking gaps not running the entire length of the board. (Havco’s Resp. to IHP’s PFOFs (dkt. #81) ¶ 13.) But the evidence Havco cites in support is insufficient to do so. First, contrary to Havco’s representation, IHP’s 30(b)(6) deponent testified that in his observation the adhesive-lacking strip “does run the entire length of the board.” (30(b)(6) Deposition of Lowell Peterson and Marcus Chorney (dkt. #74) 48:16-50:20.) Second, while Havco cites to evidence that the adhesion migrates during production, Havco fails to cite to any evidence that the adhesion migrates to the point of entirely filling the gaps. (*See, discussion supra*, Undisputed Facts Part V.B.) Moreover, it is undisputed that the samples sent to Dr. Dagher, Havco’s expert, had adhesive-lacking strips which ran the entire length of the boards. Dr. Dagher’s speculation that the adhesive coverage *could* exceed 96.3% is insufficient to support a genuine issue of material fact and, in any event, fails to support Havco’s argument that the adhesive-lacking strips may not run the entire length of the board. Third, Havco argues that IHP does not perform any direct tests to determine the extent of migration. IHP disputes this, contending that it conducts visual tests. Regardless, absent any evidence that the Pound Saver products lacks adhesive-lacking strips, any alleged failure on IHP’s to conduct post-production tests does not create a genuine issue of material fact.

each of the depending claims based on the disputed independent claims. Still, the court will address the other claims for which Havco asserts a basis for finding noninfringement in order to define the issues for the jury.

D. “continuous trailer floor” limitation

Claim 1 of the ‘735 patent and claim 1 of ‘824 patent both contain a “continuous trailer floor” limitation:

said plurality of hardwood boards being arranged such that at least one of said first side surface and said second side surface of each of said hardwood boards approximates one of said first side surface and said second side surface of adjacent boards to form a *continuous trailer floor* . . .

(‘735 patent (dkt. #1-1) 10:39-44.)

said plurality of wood boards being arranged such that at least one of said first side surface and said second side surface of each of said wood boards approximates one of said first side surface and said second side surface of adjacent boards or a mating portion of a metallic component of the trailer to form a *continuous trailer floor* . . .

(‘824 patent (dkt. #1-2) 11:8-14.)

IHP contends that its Pound Saver product does not infringe claim 1 of each patent because it does not make or sell a “continuous trailer floor,” rather it sells a kit containing floor boards which its customers assemble into a continuous trailer floor. As such, IHP contends that it cannot be liable for direct infringement, which is the only type of infringement plead in IHP’s amended complaint.

In response, Havco posits three main arguments. *First*, Havco argues that IHP has misconstrued the claims. Specifically, Havco argues that the claim simply discloses a

composite flooring system which can be “designed to form a continuous trailer floor.” (Havco’s Combined Br. (dkt. #80) 25.) For support, Havco argues that the term “to form” in the phrase “to form a continuous trailer floor” “describes the ‘approximation’ arrangement of side surfaces of the boards so that, when installed in a trailer, the boards form a continuous floor.” (Havco’s Reply (dkt. #96) 13.) Havco also cites to the preferred embodiment of the ‘735 patent which describes how the shiplaps are machined so that “[w]hen the floor boards are assembled in a trailer such that the side edges of corresponding boards are squeezed together, the shiplaps 18 of adjacent boards overlap to form a seam The finished floor boards are assembled into a kit of about eight boards for installation in trailers.” (‘735 patent (dkt. #1-1) 6:29-40; *see also* 8:62-64 (describing a kit consisting of eight 20-foot long boards).) The court agrees that the patent describes a composite flooring system or kit made up of individual floor boards for later assembly by trailer manufacturers or trailer floor installers. Consistent with the plain language of the patent claim and the specification, the “continuous trailer floor limitation” does not require the invention be fully assembled and installed.

Second, Havco argues that there is a genuine issue of material fact as to whether IHP has made a “continuous trailer floor” in the past, pointing to photographs depicting assembled floors in support. In particular, Havco identifies a photograph taken at a 2011 trade show in its opening brief in support of its motion for infringement. (Havco’s Combined Br. (dkt. #80) 25; Havco’s PFOFs (dkt. #82) ¶ 78.) In response, however, IHP’s CEO, Marcus Chorney, averred that the Pound Saver floor displayed at the trade show was assembled by one of its customers Utility Trailer, (Chorney Decl. (dkt. #92) ¶¶ 4-7), to which Havco has no reply. For the first time in its reply brief, Havco instead

identifies a second photograph purporting to be an assembled, continuous trailer floor. This photograph allegedly was included in a presentation to a potential customer in August 2010, and deposition testimony describing the photograph reveals that it depicts a test which simulates a “real life application” of a “forklift driving over a floor.” (Declaration of Jeffrey A. McIntyre, Ex. 1 (dkt. #85-1) 53 (identified as part of Ex. 35 to IHP’s 30(b)(6) deposition).) Even assuming this photograph depicts a continuous trailer floor, Havco failed to submit any evidence that IHP assembled the floor. In any event, Havco’s failure to identify it in its opening brief and propose a finding of fact as to the specific photograph, precludes it attempting to create a genuine issue of material fact as to whether IHP has assembled a continuous trailer floor. Regardless, in light of the court’s construction of the term to not require assembly of the trailer floor by Havco, evidence of occasional displays of assembled floors does not preclude a finding that this limitation is not met.

Third, Havco argues that IHP is liable for infringement pursuant to 35 U.S.C. § 271(b) and (c). Havco’s ability to assert a contributory or induced infringement claim, however, depends on whether it has plead such a claim. Havco’s amended complaint does not cite to any specific subsection under § 271, but nor does it contain any allegations to put IHP on notice of a claim for contributory or induced infringement. As such, the court finds that Havco’s amended complaint is limited to a direct infringement claim.

Recognizing this, Havco seeks leave to amend its complaint to add a claim for contributory or induced infringement. (Dkt. #101.) While courts should “freely give leave” to amend pleadings “when justice so requires,” Fed. R. Civ. P. 15(a)(2), “leave is

inappropriate where there is undue delay, bad faith, dilatory motive on the part of the movant, repeated failure to cure deficiencies by amendments previously allowed, undue prejudice to the opposing party by virtue of allowance of the amendment, or futility of the amendment.” *Villa v. City of Chic.*, 924 F.2d 629, 632 (7th Cir. 1991) (citing *Foman v. Davis*, 371 U.S. 178, 183 (1962)). Moreover, where a scheduling order is in place, as here, modification of the order requires a showing of “good cause.” Fed. R. Civ. P. 16(b)(4); *see also Trustmark Ins. Co. v. General & Cologne Life Re of Am.*, 424 F.3d 542, 553 (7th Cir. 2005) (“Rule 16(b)’s ‘good cause’ standard primarily considers the diligence of the party seeking amendment.” (quotation marks and citation omitted)).

In an effort to show good cause, or at least diligence, Havco points to IHP’s response to interrogatories served earlier in this case, in which IHP was asked to “identify and fully describe, on a claim by claim basis, the factual basis for your contention that the asserted claims” are not infringed. In response, IHP failed to offer contribution or inducement as a defense, and failed to amend its interrogatory responses. (6/22/11 Declaration of Jeffrey A. McIntyre, Ex. 15 (dkt. #33-16) No. 10.) This does not end the discussion, however, since arguably an amendment was not necessary given IHP’s disclosure of this defense in a deposition and in an expert report.

Certainly, Havco could have, and arguably should have (1) anticipated this defense as soon as it confirmed Pound Saver’s packaging and installment by customers in IHP’s 30(b)(6) deposition on October 5, 2011, and (2) moved for leave to amend its complaint at that time. By January 20, 2012, Havco was put on notice of IHP’s reliance on its packaging to argue that it did not infringe the “continuous trailer floor’ limitation. At that time, IHP’s expert Dr. Higgins opined: “[T]he Pound Saver product, as sold and

shipped by IHP, does not form a continuous trailer floor, which is required for infringement of each asserted claim of the ‘735 patent and the ‘824 patent.” (Higgins Rebuttal Report (dkt. #73) ¶ 28.)

Accordingly, the court finds Havco was not diligent in seeking leave and will deny its motion for leave to amend its complaint to add a claim for contributory or inducing infringement. Of course, all of this is rendered largely inconsequential in light of the court’s determination that the claim language does not require assembly of the trailer floor by the party practicing the patent to find infringement. Therefore Havco’s claim of direct infringement remains viable.

E. Altering the FRP

All asserted claims of the ‘942 and ‘765 patents, all of which are also method claims, require altering of the material bonded to the hardwood surface:

Altering at least on major surface of the planar layer of fiber reinforced polymer to form an altered major surface by sanding or abrasion

(‘942 patent (dkt. #1-3) 14:30-32.)

Altering at least one major surface of the water impervious layer to provide a bonding surface to the water impervious layer

(‘765 patent (dkt. #1-4) 14:15-17.)

It is undisputed that IHP does not *itself* alter any surface of the FRP. As described in the undisputed facts, IHP purchases its FRP from a company called Lamilux, and it is Lamilux which sands the FRP surface as part of its manufacturing process.

Havco argues that Lamilux’s “‘altering’ step can be imputed to IHP since Lamilux manufacturers the FRP for IHP under its specifications.” (Havco’s Combination Br. (dkt. #80) 34.) In support, Havco cites to Dr. Dagher’s report, which states “I have been informed that Lamilux makes the fiber reinforced polymer (FRP) component for IHP’s Pound Saver product under IHP’s specifications and requirements.” (Dagher Decl. (dkt. #83) ¶ 4.) The evidence that Dr. Dagher cites in support for his understanding, however, is simply Lamilux’s website, which states that its final processing stages includes a sanding process, reinforcing IHP’s argument that it does not alter the FRP. In reply, Havco offers further evidence to support its argument that IHP provides specification and requirements to Lamilux. The FRP purchased by IHP is prepared for bonding in one of three ways: (1) both side smooth; (2) corona treatment; or (3) sanding. (Pl.’s Reply (dkt. #96) 17 (citing 3/12/12 Supp. Dagher Decl. (dkt. #98) ¶¶ 3-7, Exs. 1-4.) IHP admits that one surface of the Pound Saver FRP is sanded.

Havco’s role in selecting a “sanding” finishing to the FRP purchased from Lamilux is sufficient to allow a jury to determine whether this step in the production process can be imputed to Havco, especially in light of the Federal Circuit’s warning that one “cannot avoid infringement, however, simply by contracting out steps of a patented process to another entity.” *BMC Res., Inc. v. Paymentech, L.P.*, 498 F.3d 1373, 1381 (Fed. Cir. 2007) Stated another way, by selecting Lamilux’s “sanding” finishing, IHP effectively controls or directs that step in the manufacturing process. *Muniauction, Inc. v. Thomson Corp.*, 532 F.3d 1318, 1329 (Fed. Cir. 2008) (“[W]here the actions of multiple parties combine to perform every step of a claimed method, the claim is directly infringed only if

one party exercises ‘control or direction’ over the entire process such that every step is attributable to the controlling party, i.e., the ‘mastermind.’” (citation omitted).)

Lastly, and related to this specific infringement claim, Havco filed a motion for leave to re-assert three independent claims, all of which do not contain the “altering” limiting. (Dkt. #100.) As the court explained in its order granting IHP’s request to limit the number of asserted claims, the court preserved the possibility of allowing Havco to add additional claims “upon a proper showing.” (11/10/11 Order (dkt. #51) 12.) But to allow amendment at this late date -- after expert report deadlines and after dispositive motion briefing -- may unfairly prejudice IHP. This potential for prejudice, coupled with Havco’s failure to explain its basis for not asserting these claims as part of the fifteen allowed, warrants denial of Havco’s request. Accordingly, the court will deny Havco’s motion to re-assert three additional claims.

F. “continuously bonded” limitation

Claim 1 of the ‘766 patent provides:

a water impervious layer *continuously bonded* to said bottom surface of each board by a substantially continuous adhesive bond.

(‘765 patent, 11:4-5 (emphasis added).) It is undisputed that IHP’s Pound Saver product contains adhesive-lacking strips running the length of the board. Havco also concedes that a lack of adhesive means a lack of bond. (Havco’s Resp. to IHP’s PFOFs (dkt. #88) ¶ 21.) Given the undisputed fact that IHP’s Pound Saver product contains adhesive-lacking strips running the length of the board, the court finds that no reasonable jury could find such a bond to be “continuous.” Accordingly, the court will deny Havco’s

motion for summary judgment of infringement on claim 1 of the '766 patent, and dependent claim 2 of the '766 patent. Moreover, finding no genuine issue of material fact and in light of Havco's briefing on this claim, the court will grant *sua sponte* summary judgment to IHP of noninfringement on all asserted claims of the '766 patent. *See Johnson v. ExxonMobil Corp.*, 426 F.3d 887, 893 (7th Cir. 2005) ("In order to grant summary judgment *sua sponte*, the court must give the losing party reasonable notice and a fair opportunity to present evidence."); *see also Yoon Ja Kim*, 465 F.3d at 1317 (holding that noninfringement of dependent claims, "necessarily follows" a finding of noninfringement of independent claims).

III. Invalidity

Havco also moves for summary judgment on IHP's claim for a declaratory judgment of invalidity and IHP's defense of invalidity. Issued patents are presumed valid. 35 U.S.C. § 282. The party seeking to invalidate a patent must demonstrate invalidity by clear and convincing evidence. *Microsoft Corp. v. i4i Ltd. P'ship*, 131 S. Ct. 2238, 2251 (2011) (reaffirming the "clear and convincing" standard of proof). IHP contends that Havco's patents are invalid because of obviousness under 35 U.S.C. § 103. While the issue of obviousness is a legal issue, it is premised on underlying facts, such as the scope and content of the prior art, differences between that prior art and the claims being challenged, the level of ordinary skill, and other "secondary considerations" to a challenge of nonobviousness. *See, e.g., Power-One, Inc. v. Artesyn Techs., Inc.*, 599 F.3d 1343, 1351 (Fed. Cir. 2010); *Group One Ltd. v. Hallmark Cards, Inc.*, 407 F.3d 1297, 1303 (Fed. Cir. 2005).

IHP argues that certain issues of fact preclude summary judgment. With regard to the prior art, IHP's expert Dr. Higgins opines that the use of FRP to reinforce wood was taught by certain prior art, namely a 1964 article by Waangard concerning the use of FRP wood composites and prior patents which were before the USPTO during prosecution of the Havco patents. Havco challenges whether this prior art is "analogous" prior art, but IHP at least raises a question of fact as to whether it is "reasonably pertinent to the particular problem with which the inventor is involved." *Innovation Toys, LLC v. MGA Entm't, Inc.*, 637 F.3d 1314, 1321 (Fed. Cir. 2011).

IHP also argues, again with support from its expert, that Havco's "inventions are merely combinations of familiar prior art elements (conventional wood trailer flooring and FRP) according to known methods (bonded together with adhesive) that yield predictable results (creation of a stronger surface that is impervious to moisture)." (IHP's Opp'n (dkt. #90) 14.) This, too, raises a genuine issues of material fact as to the differences between the prior art and the claimed invention.

Finally, IHP challenges Havco's evidence in support of a finding of "commercial success" -- one of the objective "secondary considerations" to determining obviousness. Specifically, IHP's expert challenges Havco's market share analysis and rate of growth. Here, too, IHP has raised a genuine issue of material fact which precludes summary judgment on the issue of obviousness of the Havco patents.

ORDER

IT IS ORDERED that:

- 1) The court's claims construction order is amended as indicated in the above opinion;
- 2) Defendant Industrial Hardwood Products, Inc.'s motion for summary judgment of patent noninfringement (dkt. #63) is GRANTED IN PART AND DENIED IN PART. The court grants the motion as to the asserted claims of the '766 patent, but denies it in all other respect;
- 3) Plaintiff Havco Wood Products, LLC's cross-motion for summary judgment of infringement and validity (dkt. #79) is DENIED;
- 4) Plaintiff Havco Wood Products, LLC's motion for leave to re-assert three claims (dkt. #100) is DENIED;
- 5) Plaintiff Havco Wood Products, LLC's motion for leave to file second amended complaint (dkt. #101) is GRANTED; and
- 6) The parties have already submitted Rule 26(a)(3) disclosures, motions in limine and proposed voir dire and instructions. In anticipation of the upcoming trial, the court sets forth the following deadlines and guidelines on additional pre-trial submissions. Counsel should take note of the bolded additions or changes to the obligations set forth in the preliminary pretrial order.
 - a. On or before Thursday, May 24, 2012, the parties shall provide opposing counsel and the court:
 - i. In addition to electronically filing voir dire questions, verdict forms and jury instructions, please submit to the court an electronic copy of each in Microsoft Word format to wiwd_wmc@wiwd.uscourts.gov.
 - ii. Exhibit lists. Any exhibits not listed shall be excluded from admission into evidence except upon good cause shown.
 - iii. Responses to motions in limine.
 - iv. Objections to exhibits.
 - v. Responses to opposing parties' voir dire questions, verdict forms, and jury instructions.
 - b. On or before Wednesday, May 30, 2012 at 12:00 p.m., the parties shall provide opposing counsel and the court:
 - i. **A short, written narrative statement of each expert's background and experience. These statements will be read**

to the jury and no proof will be received on the matters covered unless an objection to the narrative statement is filed.

- ii. A list of portions of depositions, to be offered into evidence at trial, by page and line references for witnesses unavailable at trial. Extensive reading from depositions is strongly discouraged. Toward that end, the proponent of a deposition may -- though is not required to -- prepare a written narrative summary of some or all deposition transcripts the party intends to offer into evidence, with annotated page and line references in parenthesis after each sentence, in lieu of part or all of the narrative of questions and answers.
- c. On or before Friday, June 1, 2012 at 12:00 p.m., the parties shall provide opposing counsel and the court:
 - i. Objections and counter designations to proffered deposition designations.
- d. Counsel are directed to consult in good faith and reach resolution on the admissibility of exhibits to the extent possible. Each party shall file copies of any *contested* exhibits they intend to offer with the court by 12:00 p.m. on Friday, June 1, 2012.
- e. The final pre-trial conference shall be held on **Thursday, May 31, 2012 at 2:00 p.m.** Please note that the court has changed the date and time of the final pre-trial conference. If this date and time does not work for either party, please consult the other party about alternative date and time, and then contact chambers.
- f. A telephonic conference shall be held on **Thursday, June 7, 2012 at 12:30 p.m.** to discuss any remaining issues. Plaintiff shall initiate the conference call to the court. Chambers can be reached at 608-264-5087.

- g. The trial shall commence Monday, June 11, 2012 at 9:00 a.m. The parties shall meet with the court at 8:30 a.m. that morning for any matters that need to be brought to the court's attention. The court notes that this trial may start later in the week given the timing of other trials. The timing of this trial will be determined at the final pre-trial conference.

Entered this 23rd day of May, 2012.

BY THE COURT:

/s/

WILLIAM M. CONLEY
District Judge